

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 16-17 were previously cancelled. Claims 13-15, 18 and 19 are cancelled. Claims 1-12 are pending in the application.

Applicants are appreciative of the indication by the Examiner, in the January 10, 2007 Interview, that the incorporation of the features of claim 14 in independent claims 1 and 12 would place the application in better condition for allowance. Arguments discussed in the Examiner Interview and presented in a Proposed Amendment to the Examiner are set forth below.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 5, numbered paragraph 9, claims 1-5, 9, 10, 12-15, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,678,714 to Olapurath et al. in view of U.S. Patent No. 6,038,585 to Togawa. This rejection is respectfully traversed because the combination of the teachings of Olapurath and Togawa does not suggest:

the information processing device receiving notifications for executability of specific task units from the work performing elements, and based on the received notifications, selecting one of the work performing elements to execute the specific task unit,

wherein the work performing element notifying the information processing device that execution of one of the task units is possible sends a task efficiency value of the executable task unit, and

wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable and sends an execution command to the selected work performing element, upon which the selected work performing element executes the task unit, based on receipt of the notifications that task units are executable and the task efficiency values from the work performing elements,

as recited in amended independent claim 1.

Further, the combination of Olapurath and Togawa does not discuss or suggest:

...sending a notification to the information processing device that the specific task unit is executable if the task unit is executable by the work performing element,

wherein the work performing element notifying the information

processing device that execution of one of the task units is possible sends a task efficiency value of the executable task unit, and

wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable to execute the specific task unit and sends an execution command to the selected work performing element, upon which the selected work performing element executes the task unit, based on receipt of the notifications that task units are executable and the task efficiency values from the work performing elements,

as recited in amended independent claim 12.

As conceded by the Examiner, Olapurath does not discuss that the information processing device receives notifications for executability of specific task units from the work performing elements, and based on the received notifications, selects one of the work performing elements to execute the specific task unit. The Examiner alleges that Togawa makes up for the deficiency in Olapurath. The Applicants respectfully disagree.

As set forth in claim 1 of Togawa, for example, Togawa discusses that an instruction book in an instruction book control device system having a plurality of processors is transmitted from one of the plurality of processors to another. The instruction book is created from a creation request and a processor is selected, from a plurality of processors, which meets an environmental condition of the created instruction book or which corresponds to a processing request corresponding to the instruction book. Togawa specifically discusses that “[w]hen the optimal processor required for a particular process on the basis of a processing procedure in the instruction book 8 is processor A, instruction book 8 first notifies a processing request to processor A,...[t]he instruction book control unit 2 makes a request for processing to the processing unit 74 through the monitoring unit 73 in the processor A environment and receives the processing results.” Togawa further discusses that the instruction book management unit 3 determines whether or not a request has been made from the instruction book control unit 2 and the instruction book processing unit 7. If a request has been made to create an instruction book, the instruction book management unit 3 receives execution notification of instruction book 8 from the instruction book control unit 2, and the instruction book management unit 3 checks the environment conditions of the instruction book 8, selects a free processor that meets the operating environment conditions, and requests processing to the selected processor.

Nowhere in Togawa is there a discussion of an information processing device receiving notifications for executability of specific task units from the work performing elements, and then based on the received notifications, selecting one of the work performing elements to execute

the specific task unit. Further, the Examiner even concedes that Togawa does not discuss that "the instruction processing units are sending the notification of executability to be received by the instruction book management unit 3 so that arrangement can be made to execute the instruction book by one of the 'free processors' within an instruction processing unit."

M.P.E.P. § 2142 requires that the prior art reference or references when combined must teach or discuss all the claim limitations in order to establish a *prima facie* case of obviousness. The Examiner concedes that Togawa does not discuss that the instruction processing units 7, 7a, 7b send notifications of executability to be received by the instruction book management unit 3 so that one of the free processors can execute the instruction book, but essentially argues that it is inherent that Togawa teaches such. The Applicants respectfully disagree.

Togawa clearly discusses that "the instruction book management unit 3 manages the instruction book notified from by the instruction book control unit...[which] transmits the instruction book, which moves between the plurality of processor, activates the processing unit in a target processor selected from among the plurality of processors in order to execute the target process in accordance with the processing procedure described in the instruction book, holds the results of processing by the processing unit in the target processor, and notifies the processing results to the instruction book control unit" (col. 2, lines 25-35). Togawa suggests only that an instruction processing unit 7, 7a, 7b is selected by the instruction book management unit 3 for processing a target process based on the operating environment conditions. Togawa does not suggest that the instruction book management unit 3 outputs a command consisting of task units assigned with an execution sequence to each of the instruction processing units 7, 7a, 7b, that the instruction processing units 7, 7a, 7b determine which task units can be executed, sending notifications as to the executability of the task units that can be executed by that particular instruction processing unit 7, 7a, 7b to be received by the instruction book management unit 3, and that the instruction book management unit 3 then sends an execution command to one of the instruction processing units 7, 7a, 7b that sent a notification of executability.

In contrast to Togawa, the present invention of claim 1, for example, recites that an information processing device sends a command consisting of task units to each of the work performing elements. Further, the work performing elements determine whether a specific task unit can be executed and at what level of efficiency, and send back notifications for executability to the information processing device so that the information processing device is able, based on the received notifications, to select which of the work performing elements should execute the

specific task unit, thereby increasing efficiency in processing. Togawa only suggests that the instruction book management unit 3 determines whether a processor meets the environment condition of the instruction book, but does not suggest that each of instruction processing units 7, 7a, 7b first receive a command consisting of the task units, determine the executable task units and determine the task efficiency of the executable task unit, and then send a notification of executability indicating the specific executable task unit and the task efficiency of the executable task unit to the instruction book management unit 3.

While Togawa discusses that the instruction book management unit 3 checks the environment condition of the instruction book 8 and selects a free processor that meets the operating environment conditions and then requests processing to the selected processor, Togawa does not suggest that the instruction book management unit 3 sends a command consisting of task units to each of the processors and then the processors send notifications of executability of the specific task units that the processors are able to execute, including efficiency of execution, from the set of task units outputted.

Further, the Examiner even concedes that Togawa does not directly discuss that the instruction processing units are sending notifications of executability to be received by the instruction book management unit. Therefore, if Togawa does not directly discuss sending notifications of executability to be received by the instruction book management unit, it is unclear as to how the instruction book management unit 3 could select an instruction processing unit based on the received notifications of executability.

Additionally, the Examiner cites the motivation of "provid[ing] for the purpose of executing a plurality of target processes by using a processing unit suited to the particular plurality of target processes" in discussing why one of ordinary skill in the art would incorporate the control device of Togawa with the system of Olapurath. Togawa allows for sequential execution of a target process by using a processing unit suited to the target process and does not suggest why one of ordinary skill would have been led to combine the teachings of Olapurath and Togawa to suggest receiving notifications for executability of specific task units of a set of task units assigned with an execution sequence of an outputted command.

Therefore, as Olapurath does not discuss or suggest "...receiving notifications for executability of specific task units from the work performing elements, and based on the received notifications, selecting one of the work performing elements to execute the specific task unit, wherein the work performing element notifying the information processing device that execution of one of the task units is possible sends a task efficiency value of the executable task

unit, and wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable and sends an execution command to the selected work performing element, upon which the selected work performing element executes the task unit, based on receipt of the notifications that task units are executable and the task efficiency values from the work performing elements,” as recited in amended independent claim 1, and as the combination of Olapurath and Togawa does not discuss or suggest “...sending a notification to the information processing device that the specific task unit is executable if the task unit is executable by the work performing element, wherein the work performing element notifying the information processing device that execution of one of the task units is possible sends a task efficiency value of the executable task unit, and wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable to execute the specific task unit and sends an execution command to the selected work performing element, upon which the selected work performing element executes the task unit, based on receipt of the notifications that task units are executable and the task efficiency values from the work performing elements,” as recited in amended independent claim 12, and there is no adequate motivation to suggest the present invention by combining Togawa and Olapurath, claims 1 and 12 patentably distinguish over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Claims 2-5 and 9-10 depend either directly or indirectly on independent claims 1, 12 and 15 and include all the features of the respective independent claims, plus additional features that are not discussed by the references relied upon. For example, claim 5 recites “two or more work performing elements capable of performing the work of the same task unit, wherein the work performing element to carry out the work of said same task unit is determined by communications between the work performing elements, in accordance with a previously determined priority order.” Therefore, claims 2-5 and 9-10 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

II. Allowable Subject Matter

Applicants are appreciative of the acknowledgement that claims 6-8 and 11 are allowed.

Conclusion

In accordance with the foregoing, claims 16-17 were previously cancelled, claims 13-15, 18 and 19 were cancelled, and claims 1 and 12 were amended. Claims 1-12 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

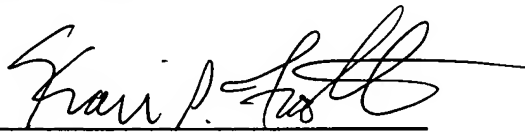
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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